



**CONESTOGA-ROVERS  
& ASSOCIATES**

US EPA RECORDS CENTER REGION 5



515445

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www.CRAworld.com

January 22, 2015

Reference No. 032504-35

Ms. Kim Hiller  
Livingston County Road Commission  
Board of County Road Commissioners of Livingston County Michigan  
3535 Grand Oaks  
Howell, Michigan  
48843-8575

Dear Ms. Hiller:

Re: Monitoring Wells in Spicer Road Right of Way  
Rasmussen Superfund Site (Site), Livingston County, Michigan

We are writing this letter on behalf of the Rasmussen Site Remediation Group (RSRG) to apply for permission to install monitoring wells in the right of way of Spicer Road adjacent to the Rasmussen Superfund Site (Site). Figure 1 shows the location of the proposed monitoring wells. During an August 25, 2014 meeting with you, Mr. H. Caine (USEPA), Mr. K. Krawczyk (MDEQ), Mr. S. Nadeau (Honigman), Mr. J. Bartholomy (CRA), and Mr. S. Rapai (CRA) you advised that the RSRG should reapply for permission to install permanent wells in the right of way. You suggested the application should outline why installation of the wells in the right of way is necessary, provide information about the denial of access by the adjacent landowners in question, and to provide information regarding the location of the proposed monitoring wells.

The Rasmussen Site is located on Spicer Road in Green Oak Township, Livingston County. The dump accepted waste during the 1960s and early 1970s. The United States Environmental Protection Agency (USEPA) placed the Site on the federal National Priorities List (NPL) in 1983. From 1996 to 2000, the RSRG operated a groundwater extraction and treatment system that addressed most of the groundwater contamination. In 2001, the groundwater remedy was changed from groundwater extraction and treatment to an ozone sparging system, allowing the RSRG to treat groundwater plume fragments. The ozone/oxygen system remains as the groundwater remedy.

Groundwater elevation contours based on data collected on August 18, 2014 are provided on Figure 1. These contours are representative of typical groundwater flow conditions, with groundwater generally flowing north. USEPA issued its Third Five-Year review on March 30, 2010. The five-year review concluded that the remedy at the Rasmussen Site continues to





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protect human health and the environment. However, in order for the remedy to be protective in the long-term, the northern groundwater plumes need to be fully characterized and delineated. USEPA has required the RSRG to install four new monitoring wells north of the Rasmussen Site. The purpose of these proposed monitoring wells is to prove that groundwater contamination from beneath the Site has not migrated north of the Site. The installation of these proposed permanent monitor wells is a critical part of the ongoing remedy and is important to ensure protection of human health and the environment.

The RSRG originally had obtained property access north of Spicer Road but the property owner subsequently refused access. Artisan Building Company owns the property north of Spicer Road. Artisan Building Company is developing a subdivision, High Hills Arbor, on the property. Figure 1 includes existing and proposed topography, lot lines, streets, lot numbers, septic fields, water lines and easements. In October 2013, Scott Willet, P.E., on behalf of Artisan Building Company wrote:

*"Artisan Building Company, the owner and developer of the platted Subdivision, does not want any wells located within any lot. Any well on a lot would impact the value of that lot. Please locate your monitoring wells along Spicer Road in the road right-of-way and outside of the future road grading areas."*

CRA marked locations for the wells in the right of way and on March 12, 2013 submitted an application to Livingston County for a permit to install four monitoring wells in order to conduct vertical aquifer sampling (VAS) in the right of way north of Spicer Road. Livingston County granted the permit (MS-1306-01) on March 22, 2013 but declined the RSRG group request to install permanent monitoring wells in the right of way.

During a Site visit between CRA, MDEQ, and USEPA, alternate VAS/monitoring well locations south of Spicer Road were offered by the MDEQ and USEPA. On May 28, 2013 CRA, on behalf of the RSRG, approached Mr. Rasmussen for permission to install the proposed wells south of Spicer Road. Mr. Rasmussen denied access. Mr. Steven Nadeau, on behalf of the RSRG, revisited access to his property with Mr. Rasmussen on several occasions, most recently in August 2014. Mr. Rasmussen adamantly denied the RSRG permission to install any more wells on his property.

Figure 1 shows three proposed monitoring well locations in the right of way north of Spicer Road and one well south of the right of way. The westernmost well location is south of Spicer



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Road because there is a steep slope along the northern shoulder of the road, which is inaccessible to the drill rig. CRA will hire a licensed well driller to install the boreholes. CRA will collect groundwater samples from each borehole. Upon completion, the boreholes will be abandoned and the ground surface restored. CRA will evaluate the data collected during the borehole installation to determine what depth is appropriate for each monitoring well. CRA and the licensed well driller will then remobilize to the Site and install the monitoring wells during a separate drilling program. The monitoring wells will be installed immediately adjacent the previous VAS boreholes, with flush mount well covers and surveyed for both location and elevation.

As part of ongoing maintenance and operations at the Site, CRA monitors water levels in all the wells at the Site and collects groundwater samples from a select set of wells on a quarterly basis. When locating the flush mount wells is difficult, as in the winter when they are snow covered (Figure 2) CRA uses survey coordinates and/or a metal detector to locate flush mount wells.

CRA anticipates the proposed new monitoring wells, as with the existing monitoring wells, will be routinely monitored for years. Both USEPA and the RSRG are and will continue to be active at the Site. CRA, on behalf of the RSRG, will continue maintenance and operations at the Site. USEPA will also oversee the Site and act as the primary contact for the general public and other stakeholders. The current Remedial Project Manager is Mr. Howard Caine ([caine.howard@epa.gov](mailto:caine.howard@epa.gov)) and USEPA maintains a website for the Site at Rasmussen, NPL Fact Sheet | US EPA.

Eventually, as the groundwater remedy progresses and reduces the lateral extent of impacts, monitoring wells will be abandoned. Wells will be abandoned in accordance with state regulation and USEPA guidance, including appropriate documentation. For example, this closure process has already taken place at the Spielberg Superfund Site, located adjacent to the western Site boundary. As part of the Spielberg Superfund Site decommissioning and closure, a network of approximately 40 monitoring wells was abandoned.

Please find attached an application for a permit to install the monitoring wells in the Spicer Road right of way at the locations shown on Figure 1. If you have any questions or concerns about this application or the proposed monitoring wells please contact either the undersigned or Mr. Howard Caine at USEPA.



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Should you have any questions on the above, please do not hesitate to contact us.

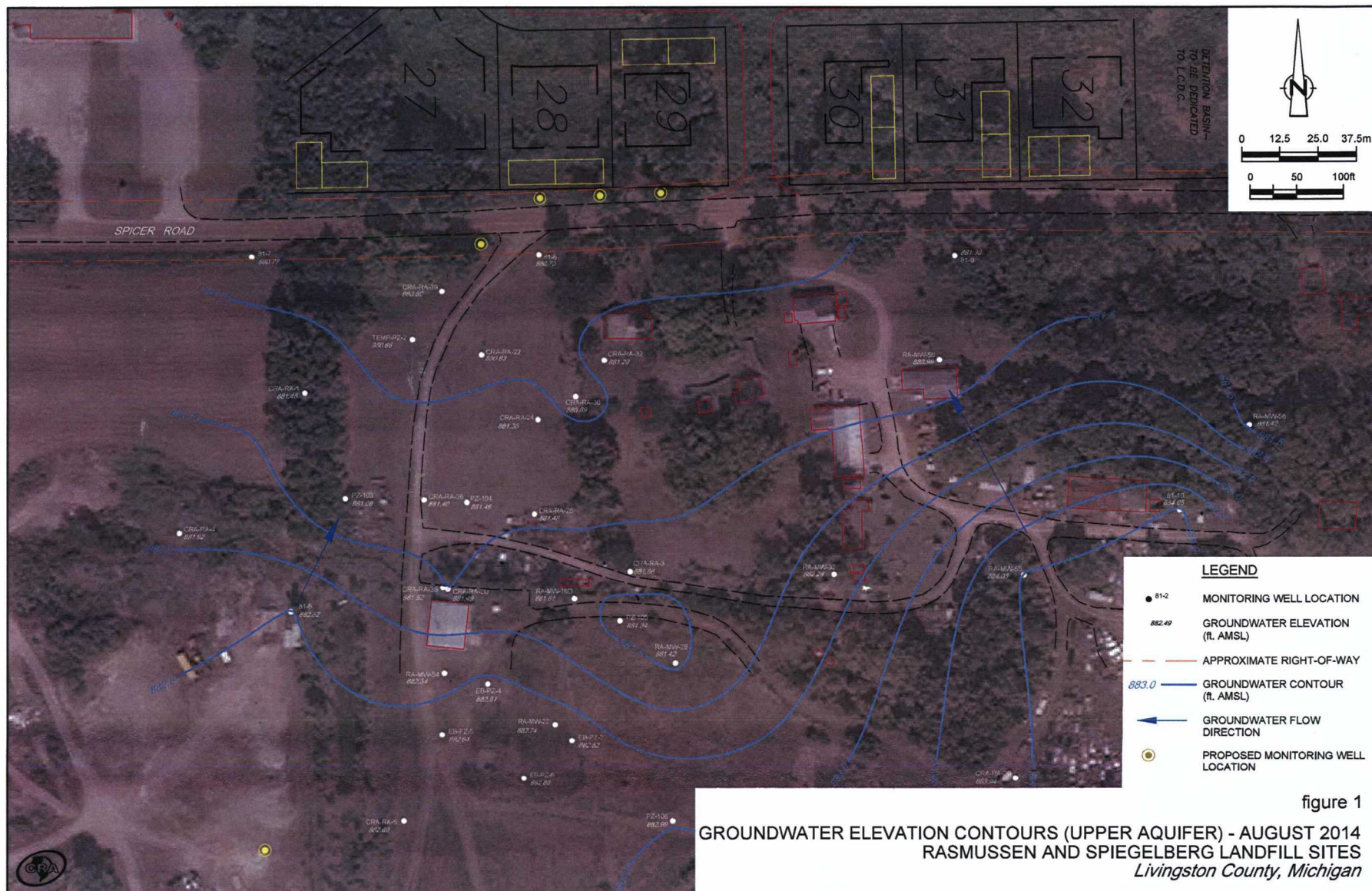
CONESTOGA-ROVERS & ASSOCIATES

Alan Deal

AD/cb/1

Encl.

cc:   Howard Caine, USEPA  
      Keith Krawczyk, MDEQ  
      Mike Stoelton, JCI  
      Chuck Pinter, Ford  
      Nan Bernado, BASF  
      Michael Simpson, Celanese  
      Steven Nadeau, Honigman Miller  
      Bart Bartholomy, CRA





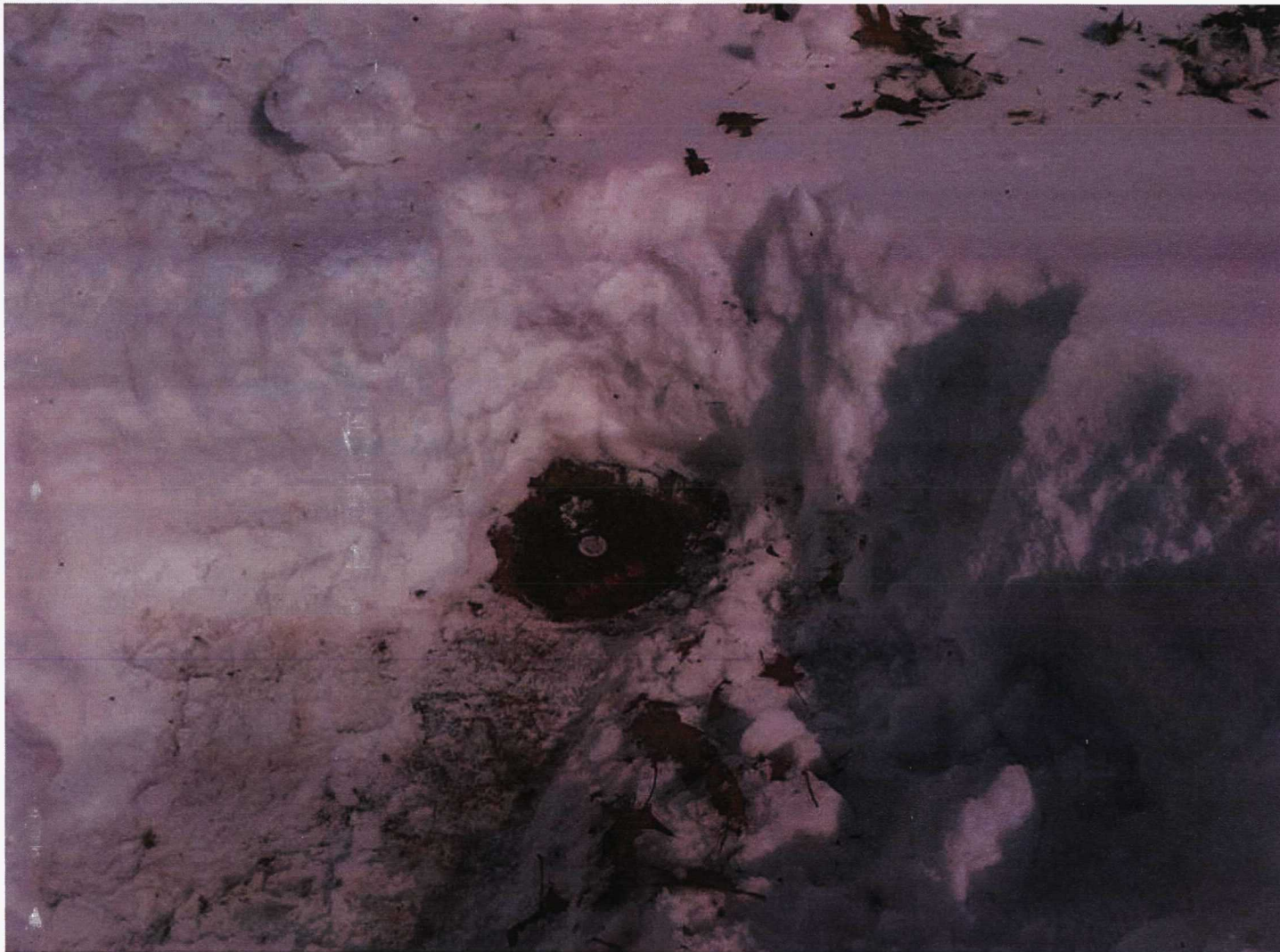


figure 2

FLUSH MOUNT MONITORING WELL  
RASMUSSEN LANDFILL SITE  
*Livingston County, Michigan*



# APPLICATION AND PERMIT

to construct, operate, maintain  
use and/or remove within a county  
road right-of-way

CRA 100 Rev 7/99


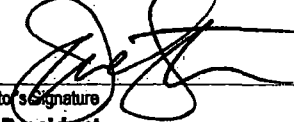
Permit Number

Issuance Date

BOARD OF COUNTY ROAD COMMISSIONERS, of LIVINGSTON COUNTY, MICHIGAN  
ADDRESS: 3535 GRAND OAKS, HOWELL, MICHIGAN 48843-8575  
TELEPHONE: 517-546-4250

If applicant hires a contractor to perform the work, BOTH must complete this form and BOTH assume responsibility for the provisions of this Application and Permit.

APPLICANT	CONTRACTOR
NAME: J.R. (Bart) Bartholomy	NAME: Joe Stearns
MAILING ADDRESS: Conestoga Rovers & Assoc. 200 W. Allegan St., Suite 300, Plainwell, MI, 49080-1397	MAILING ADDRESS: Stearns Drilling 6974 Hammond SE Dutton, MI 49316
TELEPHONE NO.: (269) 685-5181	TELEPHONE NO.: (616) 698-7770

 Applicant's Signature Title Project Manager Date: 1/22/15	 Contractor's Signature Title President Date: 1/22/15
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FINANCIAL REQUIREMENTS	ATTACHMENTS REQUIRED
Application Fee _____	Plans and Specs. _____
Permit Fee _____	Bond _____
Est. Inspect. Fee _____	Proof of Insurance _____
Bond _____	Yes _____ No _____
Deposit _____	P.I. \$ _____ P.D. \$ _____
Other _____	Other _____
To Be Billed _____	
Receipt Number _____	
Date _____	

## APPLICATION

Applicant and/or Contractor request a Permit for the purpose indicated in the attached plans and specifications at the following location:

CITY \_\_\_\_\_ /or TOWNSHIP Green Oak SECTION 19  
NAME OF ROAD 9040 Spicer Road Lot # \_\_\_\_\_  
for a period beginning April 1, 2015 and ending June 30, 2015  
and agrees to the terms of the permit.

## PERMIT

A permit is granted in accordance with the foregoing application for the period stated above, subject to the following terms agreed to by the Permit Holder. When Applicant hires a Contractor the "Permit Holder" is both the Applicant and the Contractor.

### RECOMMENDED FOR ISSUANCE:

Investigator \_\_\_\_\_  
Dat \_\_\_\_\_ Title \_\_\_\_\_

### BOARD OF COUNTY ROAD COMMISSIONERS LIVINGSTON COUNTY, MICHIGAN

By \_\_\_\_\_  
By \_\_\_\_\_  
By \_\_\_\_\_

1. All work performed under this permit must be done in accordance with the plans, specifications, maps and statements filed with the Commission and must comply with the Commission's current requirements and specifications on file at its office and M.D.O.T. specifications.
2. **Fees and Costs.**  
Permit Holder shall be responsible for all fees incurred by the Commission in connection with this permit and shall deposit estimated fees and costs as determined by the Commission, at the time the permit is issued.
3. **Bond.**  
Permit Holder shall provide a cash deposit, letter of credit or bond in a form and amount acceptable to the Commission at the time permit is issued.
4. **Insurance.**  
Permit Holder shall furnish proof of liability and property damage insurance in the amount stated on this permit naming the Commission as an insured. Such insurance shall cover a period not less than the term of this permit and shall provide that it cannot be cancelled without ten (10) days advance written notice by certified mail with return receipt required to the Commission.
5. **Indemnification.**  
Permit Holder shall hold harmless and indemnify and keep indemnified the Commission, its officers and employees from all claims, suits and judgments to which the Commission, its officers, or employees may be subject and for all costs and actual attorney fees which may be incurred on account of injury to persons or damage to property, including property of the commission, whether due to the negligence of the Permit Holder or the joint negligence of the Permit Holder and the Commission, arising out of the work under this permit, or in connection with work not authorized by this permit, or resulting from failure to comply with the terms of this permit, or arising out the continued existence of the work product which is the subject of this permit; or any other claim relating to or arising out of the operations, use or continued existence of the work which is the subject of this permit.
6. **Miss Dig.**  
The Permit Holder must comply with the requirements of Act 53 of Public Acts of 1974, as amended. CALL MISS DIG AT (800) 482-7171 AT LEAST THREE (3) FULL WORKING DAYS, BUT NOT MORE THAN TWENTY-ONE (21) CALENDAR DAYS, BEFORE YOU START WORK. Permit Holder assumes all responsibility for damage to or interruption of underground utilities.
7. **Notification of Start and Completion of Work.**  
Permit Holder must notify the Commission at least 48 hours before starting work and must notify the Commission when work is completed.
8. **Time Restrictions.**  
All work shall be performed Mondays through Fridays between 8:00 A.M. and 5:00 P.M. unless written approval is obtained from the Commission, and work shall be performed only during the period set forth in this permit.
9. **Safety.**  
Permit Holder agrees to work under this permit in a safe manner and to keep the area affected by this permit in a safe condition until the work is completed. All work site conditions shall comply with Michigan Manual of Uniform Traffic Control Devices.
10. **Restoration and Repair of Road.**  
Permit Holder agrees to restore the road and right-of-way to a condition equal to or better than its condition before the work began; and to repair any damage to the road right-of-way which is the result of the facility whenever it occurs or appears.
11. **Limitation of Permit.**  
This permit does not relieve Permit Holder from meeting other applicable laws and regulations of other agencies. Permit Holder is responsible for obtaining additional permits or releases which may be required in connection with this work from other government agencies, public utilities, corporations and individuals, including property owners. Permission may be required from the adjoining property owners.
12. **Revocation of Permit.**  
This permit may be suspended or revoked at will, and the Permit Holder shall surrender this permit and alter, relocate or remove its facilities at its expense at the request of the Commission. It is to be understood that the rights granted herein are revocable at the will of this Board and that the Permit Holder acquires no rights in the highway and expressly waives any right to claim damages or compensation in case this permit is revoked. In the event the County Road Commission determines it is in the public interest to widen or make any other improvements to the county road in which this permit is granted, Permit Holder agrees that if, in the course of widening, altering or modifying said road right-of-way and/or the roadbed itself which necessitates changes, modifications, or alterations to the Permit Holder's installation within or outside the existing county road right-of-way, such changes, alterations and modifications will be undertaken promptly upon receipt of a written request from the County Road Commission and without costs or expenses to the County Road Commission. The Permit Holder herein acknowledges that the contents of this paragraph are a substantial portion of the consideration received by the County Road Commission in the issuance of this permit.
13. **Violation of Permit.**  
This permit shall become immediately null and void if Permit Holder violates the terms of this permit and this Commission may require immediate removal of Permit Holder's facilities, or the Commission may remove them without notice at Permit Holder's expense.
14. **Assignability.**  
This permit may not be assigned without the prior approval of the Commission. If approval is granted, the assignor shall remain liable and the assignee shall be bound by all terms of this permit.
15. This permit is subject to supplemental specifications on file with the Road Commission and Act 200 of Public Acts of 1969.
16. **Cooperation With Others.**  
The issuance of this permit does not give the Permit Holder an exclusive right to work within the area covered by this permit. The Permit Holder shall cooperate with others and shall conduct his operations in such a fashion as to cause minimum conflict with and/or inconvenience to others working in area. The work of others does not relieve the Permit Holder of this responsibility to complete the work in accordance with the permit.



## Caine, Howard

---

**From:** Caine, Howard  
**Sent:** Friday, April 26, 2013 3:27 PM  
**To:** 'Deal, Alan'  
**Cc:** 'krawczyk@k@chigan.gov'; 'Nadeau, Steven C.'; 'michael.l.stoelton@jci.com'; 'cpinter@ford.com'; 'Simpson, Steven M., GlobalREM/US'; 'Bartholomy, Bart'; 'Rapai, Steve'  
**Subject:** RE: ~COR-032504-35~ Alaternate VAS/MW Locations - Rasmussen

Alan, I have been in contact with Keith Krawczyk. We concur with the proposed groundwater monitoring well locations and the location of the alternate VAS location.

Please let us know your installation schedule once it is established. I am going to try to come up on one of the days if my schedule permits.

Thanks...Howard

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**From:** Caine, Howard  
**Sent:** Friday, April 12, 2013 1:59 PM  
**To:** 'Deal, Alan'  
**Cc:** krawczyk@k@chigan.gov; Nadeau, Steven C.; michael.l.stoelton@jci.com; cpinter@ford.com; Simpson, Steven M., GlobalREM/US; Bartholomy, Bart; Rapai, Steve  
**Subject:** RE: ~COR-032504-35~ Alaternate VAS/MW Locations - Rasmussen

Alan, thanks for the update. I will confer with Keith on the locations and hope to get back to you shortly on this matter.

Howard

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**From:** Deal, Alan [<mailto:adeal@craworld.com>]  
**Sent:** Friday, April 05, 2013 6:46 AM  
**To:** Caine, Howard  
**Cc:** krawczyk@k@chigan.gov; Nadeau, Steven C.; michael.l.stoelton@jci.com; cpinter@ford.com; Simpson, Steven M., GlobalREM/US; Bartholomy, Bart; Rapai, Steve; Project Email Hold  
**Subject:** ~COR-032504-35~ Alaternate VAS/MW Locations - Rasmussen

Howard,

I hope this finds you well. Please find attached a letter describing the situation with respect to access north of Spicer road and alternate VAS and monitoring well locations. Once you confirm the locations are suitable we will schedule the drilling and notify you when we are ready to proceed.

If you have any questions contact Steve Nadeau or me.

Thanks

Alan Deal, P.Geo.  
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Dartmouth N.S.  
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Cell: (902)456-2975